A REMARKABLE FISH FROM LORD HOWE ISLAND.

Plate XLVII.

By William Macleay, F.L.S, &c.

Mr. H. T. Wilkinson, Visiting Magistrate of Lord Howe Island, brought with him from that place, a few weeks ago, a Fish which had been picked up dead on the beach there. It was handed to me for identification, or, if new, for description, by his brother Mr. C. S. Wilkinson, Government Geologist.

I cannot find a record anywhere of the existence of any such fish, and indeed so curious is it in many particulars, that I cannot even venture to point out its affinities. I have given it the generic name of *Ctenodax*, from a fancied resemblance to the teeth of the Odacina, but it cannot be placed in that group, nor indeed in any group of the *Labridæ*, and I am not at all sure that it belongs even to the order *Acanthopterygii pharyngognathi*. In the meantime, imperfect though my diagnosis is, I give a drawing and description of it, so that others may have the opportunity of forming an opinion of what is undoubtedly a very extraordinary Fish.

Genus. Ctenodax.

Of elongate subcylindrical form. Scales small, firm, rigid, ctenoid, keeled, and spinous. Dorsal fin long, the spinous portion low, the spines only connected by a membrane at the base. Head rounded at the muzzle. Teeth in a single row. Lower jaw pointed and deeply emarginate at the symphysis. A bony ridge on the vomer. The tongue pointed and cup-shaped. Mouth oblique. Eye large. Lateral line continuous and nearly straight. Ventral fins $\frac{1}{5}$, short and close together. Caudal fin small and forked, two strong converging keels on the tail. Gills, 4. Branchiostegals, 3.

CTENODAX WILKINSONI.

D. 14/10. A. 1/10. L. lat. 90. L. tr. 7/14.

The height of the body at the ventral fins is one-seventh of the total length; the length of the head is nearly one-fourth of the same. The form is elongate, very slightly compressed and tapering towards the tail. The scales are closely adherent to the skin and to one another, so that it is extremely difficult to separate one for examination, but the drawing by Dr. von Lendenfeld (fig. 5), gives a good idea of the general character of them. Each scale has about eleven longitudinal ridges with 5 or 6 recumbent spines on each ridge; laterally the scales overlap one another as shown in fig. 6, but the free posterior edge of each only very slightly overlaps the one behind it. The scales in the aggregate as shown in fig. 4, assume an appearance of being square, with a multiplicity of parallel longitudinal lines crossed at right angles by similar transverse lines. The spinous dorsal fin, which commences over the middle of the ventrals is composed of short, strong, isolated spines, connected at the base only by a membrane; the soft dorsal which is continuous with it, is shorter and higher, and densely scaly. The anal fin is like the soft dorsal, but is placed a little nearer the tail, the spine is minute. The caudal fin is small and forked; two very strong keels or ridges on the tail converge towards the middle of the fork of the fin.

The pectoral fins are rather small, about twice the length of the ventrals, which are placed close together. The eye is large, lateral, much nearer to the upper than under surface of the head, and slightly nearer the snout than the extremity of the operculum. That and the preoperculum are unarmed and densely covered with scales. The snout is rounded and without scales. The mouth is oblique; the maxillary extending to beneath the anterior margin of the orbit.

The teeth are in a single row, long, slender, and so packed together as to resemble the solid teeth of the *Scaridæ*, excepting

at their apices which are free and minutely pointed. Fig. 2 shows distinctly the teeth of the lower jaw. In the upper jaw there are at the symphysis some round, smooth, nodular-like protuberances extending some distance back on the vomer. The color is uniform sooty black. Length, 7 inches.

I have been compelled, in the foregoing description, to confine myself entirely to external characters; a complete and satisfactory investigation could not be made without injury to the specimen.

EXPLANATION OF PLATE XLVII.

Fig. 1.—Ctenodax Wilkinsoni. Nat. size.
Fig. 2.—Side view of mouth magnified.
Fig. 3.—Front view of ditto ditto.
Fig. 4.—Some scales of side slightly magnified.
Fig. 5.—Single scale magnified.
Fig. 6.—Three scales of transverse row in natural position magnified.